

MSU 4.1-528  
Appl. No. 09/669,833  
April 1, 2003  
Reply to Office Action of Jan. 23, 2003

#### REMARKS/ARGUMENTS

Claims 29 and 30 are pending. No claims are allowed.

This amendment is filed with a Request for Continued Examination. The Examiner indicated in a telephone conversation on March 26, 2003, that she would consider the amendments which have been made to Claims 29 and 30 by this amendment accompanying the Request for Continued Examination.

Claims 29 and 30 have been amended to cancel reference to fusion proteins and DNAs encoding the same and to instead, recite a method for producing antibodies and monoclonal antibodies, respectively, by using an "isolated" *Sarcocystis neurona* antigen selected from the group consisting of the 16 (±4) kDa antigen and the 30 (±4) kDa antigen. Claims 32-35 have been cancelled. Support for the amendments can be found throughout the specification but in particular at pages 26-27 which discusses making polyclonal and monoclonal antibodies using the 16 and/or 30 kDa antigens and Example 1 which discusses making monoclonal antibodies using the 16 and/or 30 kDa antigens.

1. Claims 29, 30, and 32-35 were rejected under 35

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U.S.C. § 112, first paragraph, because of the applicant's amendment (Paper No. 7) in which the terms "16 ( $\pm 4$ )" and "30 ( $\pm 4$ )" were replaced with the terms "16" and "30", respectively. The rejection stated that the above amendment introduced new matter into the application.

The applicants believe that the terms "16" and "30" are inherent in the terms "16 ( $\pm 4$ )" and "30 ( $\pm 4$ )", respectively. However, the claims have been amended to replace the terms "16" and "30" with the terms "16  $\pm 4$ " and "30  $\pm 4$ ", respectively.

The presently amended claims are believed to satisfy 35 U.S.C. § 112, first paragraph. Reconsideration of the rejection is requested.

2. Claims 29, 30, and 32-35 were rejected under 35 U.S.C. § 112, first paragraph. The rejection is an inadequate written description.

Claims 29 and 30 have been amended to recite a method for producing antibodies and monoclonal antibodies, respectively, by using an "isolated antigen" *Sarcocystis neurona* antigen selected from the group consisting of the 16 ( $\pm 4$ ) kDa antigen and the 30 ( $\pm 4$ ) kDa antigen. Claims 32-35 have been cancelled.

Currently amended Claims 29 and 30 are believed to be adequately enabled by the specification as set forth below.

Pages 26-27 discuss making polyclonal antibodies by injecting a suitable host (preferably, a horse, swine, rabbit, sheep, or goat) with the 16 and/or 30 kDa antigens (page 26, lines 27-32) to induce production of the antibodies specific for the 16 and/or 30 kDa antigens by methods well known in the art (page 26, line 32, to page 27, line 3). Methods for isolating the antibodies from other serum components such as affinity chromatography, ammonium sulfate precipitation, DEAE column chromatography are well known in the art. This is believed to support currently amended Claim 29.

Page 27, lines 4-22, and Example 1 discuss making monoclonal antibodies against each of the antigens. Example 1 describes purifying the antigens by two-dimensional gel electrophoresis (page 33, lines 29-34), immunizing mice with the purified 16 and/or 30 kDa antigens (page 34, lines 7-10), and checking the mouse serum for antibodies specific for the 16 and/or 30 kDa antigens (page 34, lines 12-14). The serum contains polyclonal antibodies against the 16 and/or 30 kDa antigens which also supports the antibodies of currently


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amended Claim 29. The example then goes on to describe making monoclonal antibodies specific for the 16 and/or 30 kDa antigens from those mice which contain antibodies in their serum which is specific for the 16 and/or 30 kDa antigens which supports currently amended Claim 30.

In light of the above, currently amended Claims 29 and 30 are believed to be enabled by the specification. Reconsideration of the rejection is requested.

3. Currently amended Claims 29 and 30 are believed to be supported by the specification and in proper form for allowance. Notice of Allowance is requested.

Respectfully,

  
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